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Date

25.05.07

Reference  
060940EP

Application No./Patent No.  
04792875.9 - 2401 PCT/JP2004015733

Applicant/Proprietor  
Meiji Seika Kaisha, Ltd.

#### COMMUNICATION

The European Patent Office herewith transmits as an enclosure the supplementary European search report under Article 157(2)(a) EPC for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

- Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

#### Refund of the search fee

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





SUPPLEMENTARY  
EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
(1) X	WO 97/43409 A (NOVONORDISK AS [DK]; DALBOEGE HENRIK [DK]; DIDERICHSEN BOERGE [DK]; SA) 20 November 1997 (1997-11-20) * sequences 65, 66 *	1,6,8	INV. C12N15/56 C12N9/24 C12N1/15 C12N1/19
(2) X	WO 98/12307 A (NOVONORDISK AS [DK]; ANDERSEN KIM VILBOUR [DK]; SCHUELEIN MARTIN [DK];) 26 March 1998 (1998-03-26) * page 77 - page 78 * * page 7 - page 11 *	1,6,8	D06M16/00 C11D3/386 C11D7/42 D21H11/20 D21H25/18 A23K1/12
(3) E	WO 2005/056787 A (MEIJI SEIKA KAISHA [JP]; WATANABE MANABU [JP]; YANAI KOJI [JP]; TSUYUKI) 23 June 2005 (2005-06-23) * sequence 44 *	1-28	
(4) A	EP 1 291 431 A1 (MEIJI SEIKA KAISHA [JP]) 12 March 2003 (2003-03-12)		
(5) A	EP 0 959 128 A1 (MEIJI SEIKA CO [JP]) 24 November 1999 (1999-11-24)		TECHNICAL FIELDS SEARCHED (IPC)
(6) A	EP 1 344 820 A1 (MEIJI SEIKA KAISHA [JP]) 17 September 2003 (2003-09-17)		C12N
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
2	Place of search Munich	Date of completion of the search 16 May 2007	Examiner Mabit, Hélène
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 79 2875

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-05-2007

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9743409	A	20-11-1997	AU EP US	3025597 A 0898618 A2 6270968 B1	05-12-1997 03-03-1999 07-08-2001
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EP 1344820	A1	17-09-2003	AU WO US	2406802 A 0242474 A1 2004043400 A1	03-06-2002 30-05-2002 04-03-2004

PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

*TRANSLATION*

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)
Applicant's or agent's file reference <b>MEJ-718</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/JP2004/015733</b>	International filing date (day/month/year) <b>22.10.2004</b>	Priority date (day/month/year) <b>03.12.2003</b>
International Patent Classification (IPC) or both national classification and IPC		
Applicant <b>MEIJI SEIKA KAISHA, LTD.</b>		

<p>1. This opinion contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the opinion</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li><input type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul> <p>2. <b>FURTHER ACTION</b></p> <p>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p> <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.</p> <p>For further options, see Form PCT/ISA/220.</p> <p>3. For further details, see notes to Form PCT/ISA/220.</p>
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Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/015733

Box No. I	Basis of this opinion
<p>1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).</p> <p>2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</p> <p>a. type of material</p> <p><input checked="" type="checkbox"/> a sequence listing</p> <p><input type="checkbox"/> table(s) related to the sequence listing</p> <p>b. format of material</p> <p><input type="checkbox"/> in written format</p> <p><input checked="" type="checkbox"/> in computer readable form</p> <p>c. time of filing/furnishing</p> <p><input type="checkbox"/> contained in the international application as filed.</p> <p><input checked="" type="checkbox"/> filed together with the international application in computer readable form.</p> <p><input type="checkbox"/> furnished subsequently to this Authority for the purposes of search.</p> <p>3. <input type="checkbox"/> In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.</p> <p>4. Additional comments:</p>	

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY			International application No. PCT/JP2004/015733																								
Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																										
<b>1. Statement</b>																											
<table> <tr> <td>Novelty (N)</td> <td>Claims</td> <td>1-5</td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td>6-28</td> <td>NO</td> </tr> <tr> <td>Inventive step (IS)</td> <td>Claims</td> <td>1-5</td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td>6-28</td> <td>NO</td> </tr> <tr> <td>Industrial applicability (IA)</td> <td>Claims</td> <td>1-28</td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td></td> <td>NO</td> </tr> </table>				Novelty (N)	Claims	1-5	YES		Claims	6-28	NO	Inventive step (IS)	Claims	1-5	YES		Claims	6-28	NO	Industrial applicability (IA)	Claims	1-28	YES		Claims		NO
Novelty (N)	Claims	1-5	YES																								
	Claims	6-28	NO																								
Inventive step (IS)	Claims	1-5	YES																								
	Claims	6-28	NO																								
Industrial applicability (IA)	Claims	1-28	YES																								
	Claims		NO																								
<b>2. Citations and explanations:</b>																											
<p>Document 1: JP 11-502701 A (Novo Nordisk A/S), 09 March 1999</p> <p>Document 2: WO 00/24879 A1 (Meiji Seika Kaisha, Ltd.), 04 May 2000</p> <p>Document 3: WO 01/90375 A1 (Meiji Seika Kaisha, Ltd.), 29 November 2001</p>																											
<p>The inventions of Claims 6-25 do not appear to possess novelty based on documents 1-3 cited in the ISR.</p> <p>Documents 1-3 describe various proteins having endoglucanase activity, genes coding for these proteins, methods for producing these proteins by culturing hosts which have been transformed with vectors containing these genes, and methods for treating fibers using these proteins (see in particular document 1, Claims 72 &amp; 82-104, SEQ ID NOS:8, 9, etc., document 2, Claims 1-83, and document 3, Claims 1-26).</p> <p>Regarding the description "multiple" in Claim 6(b) of this application, although the specifications describe in paragraph 0029 that "the number of amino acids involved in 'deletions, substitutions, insertions, additions' and other modifications is preferably 1-30 or more preferably 1-10 or still more preferably 1-6," the number is not particularly limited. Thus, the proteins of Claim 6 of this application cannot be distinguished as an object from the proteins described in documents 1-3.</p> <p>Moreover, regarding the description "multiple" in Claims 8(ii) of this application, although the specifications describe in paragraph 0041 that "the number of bases that may be deleted, substituted, inserted or added is preferably 1-30 or more preferably 1-18 or still more preferably 1-9," the number is not particularly limited. Thus, the polynucleotides of Claim 8 of this application cannot be distinguished as an object from the polynucleotides described in documents 1-3.</p> <p>The inventions of Claims 26-28 do not appear to possess novelty based on documents 2-3 cited in the ISR.</p> <p>Documents 2-3 describe the use of preparations containing the various proteins having endoglucanase activity mentioned above in process for de-inking old paper by treating it with de-inking chemicals, process for treating paper pulp to improve its freeness, and process for treating cellulose-containing fiber to improve the digestibility of animal feed (see in particular document 2, Claims 84-85 and document 3, Claims 27-29).</p> <p style="text-align: right;">(Continued in Supplemental Box)</p>																											

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International application No.  
PCT/JP2004/015733

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

The inventions of Claims 1-5 appear to involve an inventive step over documents 1-3 cited in the ISR.

Documents 1-3 do not describe a protein having endoglucanase activity which is derived from a microorganism of the genus *Staphylotrichum*, nor could this be easily arrived at by a person skilled in the art from the descriptions of documents 1-3.